

Dewey's conceptualization of the public as polity contextualized: the struggle for democratic control over natural resources and technology

Torjus Midtgarden

Centre for the Study of the Sciences and the Humanities, University of Bergen, Norway

torjus.midt garden@uib.no

Abstract

This article explores John Dewey's conceptualization of the public as polity in his lecture notes from 1928. Dewey's conceptualization suggests an account of the democratic legitimacy of public regulation of economic activities by focusing on polity members' mutual interest. Contextualized through Dewey's involvement in practical politics the article specifies the conceptualization by a policy focus on natural resources and technology, and explores and discusses it through two issues for democratic control over policy development: centralization of power in federal government; and the failure to understand, predict and control consequences of technology. Finally, exploring its relevance in a context of economic globalization the article rearticulates the conceptualization in terms of transnational relations and solidarities, using the transnational peasant organization *La Via Campesina* as an example.

Keywords

John Dewey, the public, democratic control, natural resources, social consequences of technology, transnational solidarity

Introduction: Dewey's conception of the public and the need for contextualization

John Dewey's *The Public and Its Problems* (1927) was published in times of comprehensive economic changes in the USA. While readings have tended to contextualize the book through Dewey's discussions with Walter Lippmann,¹ Dewey's diagnosis of the problem of the public may at the same time be seen to respond to a set of serious consequences of economic activities. Against the background of his definition of the public as those who are "affected by the indirect consequences of transactions" (LW2, 245–246) Dewey refers to segments of the working population with no legal protection or security: child workers, workers with no insurance against illness, no old age pension or minimal wage, and women workers without legal protection of their maternal health.² The diagnosis thus points to the dire need for public regulation of economic activities. Yet, in lecture notes from 1928³ Dewey provides a reconceptualization of the public as polity that has passed unnoticed in the scholarly literature: the public, he suggests, is constituted on the basis of members' "mutual interest" in transactions and their control (Dewey 1928). In this article I take this conceptualization as suggesting an account of the democratic legitimacy of regulation of economic activities (section 1). In his lectures, however, Dewey fails to specify policy areas for regulation as well as to consider ways in which a polity could exert effective democratic control over policy development. Therefore, in order to explore the conceptualization and its continuing relevance I will interpret it through other texts but also by turning to Dewey's actual involvement in practical politics in the late 1920s and the 30s.⁴ Through two organizations Dewey helped to found and run he promoted policies for public regulation while holding regulation in certain policy areas as crucial for a more equal distribution of opportunities: natural resource development and technological infrastructure implementation for resource development and distribution of produced goods and services (section 2). As for the matter of democratic control over policy development, I select two issues for consideration. Firstly, while Dewey along with many progressives held corporate concentration of economic power to be a major problem for democracy, he also saw the evolving centralization of power in federal government and administration as an obstacle. In response to this problem, the organization Dewey co-founded with John Marsh, the *People's Lobby*, developed practices for countering this concentration of power through an "ongoing support for a congressionally centered federal government" (Lee 2015, 8). I briefly contrast these practices with a prominent historical example of so-called "decentralized administration" in the area of natural resource development: the *Tennessee Valley Authority* (section 3). Secondly, anticipating David Collingridge's classical work in technology assessment (1980), Dewey saw the failure to understand, predict and control consequences of science and technology as a major problem for democratic control of policy development (section

¹ See for example Westbrook 1991; Bohman 2004, 2010; MacGilvray 2010, Rogers 2009, 197–206, 2010.

² See LW2, 274–275; Dewey 1928.

³ Dewey gave lectures in social and political philosophy four times at Columbia University between 1923 and 1928 (see Deen 2016, 509). While only lecture notes for the first of these series of lectures have been published (in MW15, 230–272), I will refer mainly to the unpublished lecture notes for the last series of these lectures.

⁴ This approach has sources of inspiration in the exegetic literature, in particular Brown 1968; Westbrook 1991; Lee 2015.

4). In view of this problem's lingering relevance I explore Dewey's model of social inquiry as a way of engaging citizens' needs and concerns and to support their capacity to influence policy development (section 5). I end by considering how the discussed institutional and epistemic problems for democratic control may reflect back on Dewey's conceptualization of the public as polity and its current relevance. Noting with John Naryan (2016) how Dewey observed and assessed adverse consequences of an evolving economic globalization before World War One, I explore how his conceptualization of the public may apply to evolving transnational relations of mutual interest and solidarity, using the contemporary transnational peasant organization *La Via Campesina* as an example (section 6).

1. Conceptualizing the public as polity

Like the definition of the public in *The Public and Its Problems (TPIP)* Dewey's reconceptualization of the public in his lecture notes from 1928 focuses on action consequences in need of regulation. Nevertheless, the reconceptualization distinguishes itself from the former definition by extending its focus from particularly affected individuals and groups to "members of the entire community" (Dewey 1928). As the lecture notes suggest, the new conceptualization draws on Thorstein Veblen's analyses of how economic activities affect life conditions and opportunities for all members of an industrial society.⁵ Like Veblen Dewey's lectures stress that, through technology development and expanding markets, producers and end-consumers have become dependent on large business corporations in control of means of production, distribution and finance. In his brief historical account, "a new source of power ... [involving] control of means of production, transportation and credit, finance – took the place of dynasties as potential and actual oppressive powers" (Dewey 1928). Moreover, this "new source of power" gave rise to "a sense of abuses and oppressions ... that have to be remedied by collective endeavour" (Dewey 1928). As for actual "collective endeavour" Dewey elsewhere tends to focus on the achievement of federal regulations and legislations that had been initiated by popular associations through the Progressive Era (1890–1920). Associations of farmers, workers, and women struggled for comprehensive federal reforms, and in *TPIP* Dewey cites a reference to several successful achievements: " 'regulation of railways, popular election of senators, national income tax, suffrage for women'" (LW2: 310).⁶ In his lectures he adds the general comment that a "democratic movement evinces" and that there is a "coming to consciousness of the public interest" (Dewey 1928).

Against this historical background Dewey presents his conceptualization of the public as polity and as a democratic basis for regulation. The public is abstractly conceived as a

⁵ See in particular the lecture notes for the lectures given in 1923: MW15, 241, 262, 266, 269, 272. For a general account of Veblen's influence on Dewey, see Tilman 1998.

⁶ The historical sociologist Elisabeth Clemens sees in the Progressive Era "a new politics based in associational life" (1997, 39). See Dewey's account of the struggles for social reforms through workers' and women's movements (LC, 74–76).

community bound together by a “mutual interest in transactions” and their control, not by shared moral commitments, like “the Great Community” evoked in *TPIP*.⁷ *The public* is thus defined as:

“an as[s]ociation of related individuals which is *functionally* constituted; that is, related on the basis of mutual interest in transactions which go on between members of the entire community; and which therefore constitute ... the basis of an attempted control of the conditions under which these transactions occur.” (Dewey 1928, original emph.)

The polity’s “functional constitution” turns on a mutual interest in transactions and their control. Such interest is not assigned to individuals as members of groups already existing due to economic or biological needs.⁸ Rather, the interest at stake is “derived, secondary or mediated” and distinct from, yet dependent on, the “primary interests” one would share as member in “primary, spontaneous, more direct groupings”, such as economic and professional groups or families. The distinction involved is further stressed by Dewey’s qualification of an interest in control as an “interest in the conditions under which *other* associations operate” (Dewey 1928, my emph., T.M.).

Nevertheless, the political community’s dependence on “primary groupings” has implications for the conceptualization of conditions for political participation. Revisiting Aristotle’s classical determination of man as “a political animal” Dewey takes “political” (or its latin counterpart “civic”) to equal “social in a generic sense”;⁹ and he adds the further qualification that “man is only indirectly and by stress a political animal” (Dewey 1928). Yet, Dewey does not simply stress Walter Lippmann’s point that individuals have limited epistemic capacities for political participation.¹⁰ Rather, Dewey suggests that through “primary groupings” people may acquire motivating reasons for becoming politically interested in the first place. Such motivating reasons could be acquired from suffering “abuses or oppressions” stemming from concentration of economic power.¹¹ As seen in the past, however, such abuses and oppressions are of the kind that “have to be remedied by collective endeavour” (Dewey 1928). Yet, while polity members’ “mutual interest” would make regulatory policies and institutions legitimate, the abstract conceptualization of the public fails to specify ways in which members could negotiate their mutual interest and make it the basis for effective democratic control of policy development.

⁷ See in particular LW2, 328–329.

⁸ Later, in *Freedom and Culture* (1939), Dewey uses the term “functional in a similar sense: “On account of the vast extension of the field of association, produced by elimination of distance and lengthening of temporal spans, it is obvious that social agencies, political and non-political, cannot be confined to localities ... To a very considerable extent, groups having a *functional basis* will probably have to replace those based on physical contiguity” (LW13, 177, my emph. T.M.).

⁹ This sets Dewey’s political philosophy apart from variants of civic republicanism in which political activity is taken not only to overcome economic and biological constraints, but to have a distinct anthropological basis, compared to other social activities, a view stated most distinctively in 20th century political philosophy in Hannah Arendt’s *The Human Condition* (1998 [1958]).

¹⁰ See Lippmann 1997 (1922), 23–52; 1993 (1927), 11, 25, 29.

¹¹ In fact, Dewey mentions one particular issue, economically powerful agents’ influence on electoral politics in terms of “campaign contributions” (Dewey 1928).

Historically, the abstractness of Dewey's conceptualization may be seen to reflect two circumstances. Firstly, as stressed by Dewey in *TPIP*, federal institutions had failed to implement regulatory policies widely perceived as required, as shown by the fate of the "Child Labour Amendment" (LW2, 311). This failure had left "[t]he public ... so confused and eclipsed that it cannot even use the organs through which it is supposed to mediate political action and polity" (LW2, 311). Against this background, a polity defined rather through the members' mutual interest suggests a projected and ideal democratic basis for regulatory policies, abstracted from effective institutional means to develop or promote such policies. Secondly, on a practical political level, the abstractly conceived relation between polity members suggests the need for new alignments between voluntary associations across civil society. Like many on the left side in politics, Dewey saw the binary party system as incapable of initiating the required regulations.¹² Already in the presidential election of 1924 Dewey had supported Robert La Follette Sr.'s *Progressive Party*¹³ which mobilized support across associations of workers and farmers. In hindsight, the abstractly conceived public may be seen to prepare intellectual ground for Dewey's own practical political efforts through *The League for Independent Political Action (LIPA)*¹⁴ and *The People's Lobby (PL)*¹⁵ that sought to build similar alliances in the late 1920s and the 30s. In fact, policies developed and promoted by these organizations, as well as practices developed by the *PL* in particular, provide clues for further exploring and specifying the abstract conceptualization of the public. My exploration will proceed along two lines. Firstly, policies promoted by both organizations serve to specify "conditions of transactions" to be subjected to public control: I focus on policies for public control over natural resources and technological infrastructures requisite for resource development and for distribution of produced goods and services (section 2). Secondly, I proceed by consulting both Dewey's theoretical work and his political practice through the *PL* in discussing how public control could become *democratic* control. I focus on two issues: the evolving centralization of power in federal government and administration (section 3); and the failure to understand, predict and control consequences of science and technology (section 4).

2. Conditions of transactions: technological infrastructures and natural resources

Public control over transportation was needed since, Dewey argued, "[p]rivate means of transport stand like a stone wall between producer and consumer" and the "gross income" of transport corporations has virtually become "a tax on the producing and consuming public" (LW9, 285). Moreover, his involvement in the *LIPA*'s and the *PL*'s policy development was premised on a perception of the increasing dependence of agricultural and industrial producers on products and technological services provided by others, and by the dependence of end-consumers on available

¹² See LW2: 311.

¹³ See Westbrook 1991, 269, 278.

¹⁴ See Brown 1968.

¹⁵ See Lee 2015.

and affordable products and services in the market.¹⁶ In the mid-1930s Dewey adopted a legal phrase to stress how new economic dependencies had in effect made all industrial and commercial activities “affected with a public interest”:¹⁷

“[I]ndustry, banking and commerce have reached a point where there is no such thing as merely private initiative and enterprise. For the consequences of private business enterprise affect so many persons and in such deep and enduring ways that all business is affected with a public interest” (LW11, 287).

However, technology development in one particular industry had crucial consequences for all other industries, and for commercial, as well as domestic life: the electric power industry. In fact, hydro electric power was a national policy issue through three decades, starting with president Theodore Roosevelt’s veto in 1903 against a bill permitting a private power company to build a hydro-power dam in Muscle Shoals at the Tennessee river.¹⁸ The rapid development of technological infrastructures for production and distribution of hydropower, as well as coal based power, made the issue of control imminent. Turbines, generators and transmission lines with increasing capacities enabled ever more extensive production and distribution. While toward the end of the 19th century production and distribution of electric power was largely a municipality affair, in the second decade of the 20th century technological infrastructures enabled power distribution beyond regulatory regimes of state legislatures and state commissions. For example, by 1912 Samuel S. Insull’s *Middle West Utilities Company* had developed and implemented infrastructures serving hundreds of municipalities across 13 states.¹⁹ In fact, in his capacity as president for the *PL* Dewey later confirmed that “the [electric] power issue is the most weighty single issue in the political field” (LW6, 166).²⁰ Moreover, his further comment that “some of the big companies producing electric power are hardly more than branches of big financial houses”, and carry an “immense complex of production and finance” (LW6, 165), suggests a main problem in regulation. By way of utility holding companies power corporations like the *Middle West Utilities* had built up immense capital bases in the 1920s in ways that were largely withdrawn from public regulation and inspection. While selling electricity retail in a given state was regulated, selling electricity wholesale across states through the grid system was not.²¹ Due

¹⁶ See LW6, 178.

¹⁷ The phrase was introduced in the *Munn v. Illinois* case (1876) where U.S. Supreme Court sustained the right of the state government of Illinois to fix “reasonable rates” for services provided by a Chicago grain elevator company. For an assessment of the historical significance of this Supreme Court decision, see Hamilton 1930.

¹⁸ See King 1959, 4–5.

¹⁹ See Lambert 2015, 30.

²⁰ In *TPIP* Dewey points out how “the rapid development of hydro-electric and super-power” has become a matter of “public concern” (LW2, 320). “In the long run”, he thinks, “few questions exceed it in importance” (LW2, 320).

²¹ See Lambert 2015, 28–30, 32–36. In 1933 the lawyer Ernest O. Eisenberg wrote: “The holding company has a definite place in our modern economic civilization. But it is imperative that our legislatures, commissions, and courts recognize that American society cannot tolerate the continuation of those legal principles which made possible the outrageous exploitation of the consuming and investing public by the holding companies in the past eight years. The law must either yield to modern changes, or break.” (1933, 291)

to this regulatory gap such “immense complex of production and finance” was overdue to become subjected to direct regulation. In fact, both the *PL* and the *LIPA* focused on electric power in their first policy statements, and the *PL* proposed publicly owned power systems as an alternative to regulation.²²

Through the *LIPA* and the *PL* Dewey called for public control over land use and natural resources development. Yet, this policy orientation, too, had long been established in the US through the Conservation Movement, fronted by former president Theodore Roosevelt and Gifford Pinchot, the first chief of the United States Forest Service. In fact, in voicing the *LIPA*’s general policy Dewey echoed the Conservationists: “[s]ince private control of natural resources, of the land with its mines, mineral deposits, water power, oil, natural gas, is the stronghold of monopolistic privilege, it must be attacked in its fortress” (LW6, 178). Already in his lectures in the 1920s Dewey held that “ownership of land and natural resources” had extensive and enduring consequences beyond owners and users (Dewey 1928), and he warned of a “ruthless exploitation of natural resources without reference to conservation for future users” (MW15, 262). In a speech given for the *PL* Dewey appealed directly to Pinchot’s authority in proposing a policy of taxation of land values for achieving “elimination of waste and conservation of natural resources” (LW9, 286). Furthermore, he presented rationales for conservation that resonate with Conservationist ideology. The Conservationists defended public control over a coordinated development of resources in land, rivers and forests to sustain a variety of social and economic needs.²³ Dewey equally defended society’s right to exert control over *land* taken in an extended sense as the ultimate source of all economic production and the sustaining basis of all material human needs.²⁴ Both Dewey and Pinchot found the ultimate justification for public control over natural resources in the principle of equal opportunity.²⁵ Even in the technological era, Dewey argued, land would be “the final source of all productivity” (LW11, 256), and thus the sustaining basis of opportunities citizens have to be “socially useful” and “to develop personal powers ... through some form of creative activity” (LW11, 256). To both Dewey and Pinchot, then, public control over natural resources was a first, necessary step to provide for a more equal distribution of opportunities. Nevertheless, Dewey criticised the most prominent implementation of Conservationist policies during the New Deal: the *Tennessee Valley Authority (TVA)*.

The *TVA* was created as a federal governmental agency for development of hydro-electric power in 1935, and it was celebrated as the single largest victory of Conservationist policy development.²⁶ As the largest public utility corporation ever built in the USA the *TVA* contributed to rapidly ascending numbers of electrified homes and rising average income levels in the

²² See Lee 2015, 65.

²³ See Pinchot 1945–1946, 15.

²⁴ “Land is the ground on which houses, stores, shops and factories are built. It is the ground farmers cultivate and from which comes all food, all textiles and all the bricks, wood and stone from which buildings are made. But it also includes all mines, all minerals, iron and oil; it includes water power, as well as coal, that are the ultimate sources of electric power” (LW11, 256).

²⁵ See Pinchot 1911, 79.

²⁶ See King 1959, 267–276.

Tennessee Valley region,²⁷ and it was seen as an example for economic development in other regions as well.²⁸ Encouraged by the *TVA*'s speedy implementation of public control over vast water power resources Dewey and Marsh proposed policies for achieving public control over other natural resources as well.²⁹ At the same time, however, Dewey criticised the *TVA* in terms of how its own policy priorities issued in discriminatory benefits. Due to electrification, fertilizer production and distribution, as well as improved flood control, land values would rise in the Tennessee Valley; such increment would benefit mainly the larger land owners and enable speculation.³⁰ Through the *TVA*, as well as other New Deal programs, Dewey thus saw the imminent possibility of a "private monopolization of opportunity" (LW11, 256).

This concern with the *TVA* invites a further question: how could policies for public control over natural resource development be subjected to effective *democratic* control?

3. Centralization of power and the issue of democratic control

In the early 1930s Dewey observed how demands for efficiency in a government's handling of issues of large scale and complexity had invited an importation of organizational forms involving concentration and centralization of power.³¹ In fact, already in the early 1920s he critically noted how increasing efficiency in large organizations came at the cost of members' opportunity to participate in decisions. Hence, "power is centralized" and "a small number of persons assume responsibility for total administration, relegating to the rest of those involved to the status of automata" (LC, 88). Particular in organizations of "representative government", he later emphasised, this is unfortunate since in the imported forms of administration members are left to be "subordinates ... [that] ... have no active part in making plans or forming policies—the function comparable to the legislative in government—nor in adjudicating disputes which arise..." (LW7, 353). Moreover, Dewey further asked how large-scale representative democracy can develop ways of responding to evolving popular needs, rather than yielding to "those who can work political machinery for their own private profit" (LW7, 353).

In fact, an early organizational approach to this problem of centralization is the *TVA*'s decentralized administration.³² *TVA* chairman David Lilienthal saw the *TVA*'s arrangements for

²⁷ See Lilienthal 1944, 20–21, 34.

²⁸ In a speech in 1933 president F.D. Roosevelt said of *TVA* that "we have an opportunity of setting an example of planning, not just for ourselves but for generations to come ..." (quoted from Lilienthal 1944, 66).

²⁹ See Lee 2015, 114.

³⁰ Dewey already in 1935 warned that "[t]he new values that will result from [the *TVA* project] are going to be absorbed by those who monopolize the land and the machines that are made out of the products of the land" (LW11, 257). Few years later this concern was brought up in internal policy discussions in the *TVA* about whether the *TVA* should, for public purposes, invest in establishing a considerable reservoir protective strip. The proponents (who eventually lost) argued that one should "capture for the public the incremental value created by the new reservoirs, an increment which would otherwise accrue to only a limited number of individuals" (Selznick 1949, 200).

³¹ LW7, 353.

³² See Lilienthal 1944, 133–166.

local involvement to provide democratic legitimacy for the *TVA* as a federal government agency, and for the very implementation of the *TVA Act* passed by the Congress in 1933. He even formulated such legitimacy in terms of Dewey's requirement that "democratic ends demand democratic methods for their realization" (1943, 201).³³ Nevertheless, as critics have pointed out, *TVA*'s decentralized arrangements had other objectives as well, such as protecting the *TVA*'s managerial autonomy within the federal system.³⁴ Moreover, as Philip Selznick's classical study (1949) shows, the local administrative organizations³⁵ used by the *TVA* to enable local involvement already cooperated with the *American Farm Bureau Federation*, a federal voluntary organization for the more prosperous farm owners and with a powerful lobby in Washington. The *TVA*'s reliance on such an organization thus involved a selection of local participators for programs and educational measures that was influenced by the *Bureau*.³⁶ Through such cooperation local groups of the more prosperous farmers became what Selznick calls "client publics" (1949, 129), while the *American Farm Bureau* in turn gained informal influence on policy development in the *TVA* through process of "informal cooptation".³⁷ Moreover, due to the *American Farm Bureau*'s influence the poorest segments of the farming population were largely excluded from involvement in *TVA* programs. In addition, tenant farmers and sharecroppers who were displaced from reservoir areas did not receive compensations and assistance as the landowning farmers did.³⁸ Although the *TVA*'s selective and discriminatory ways of responding to demands and needs of the local farming population could partly be seen as unanticipated consequences of the adopted administration scheme,³⁹ they strikingly contradicted Lilienthal's democratic legitimization, articulated in the name of an undifferentiated polity or "people".⁴⁰

How, then, could Dewey's dictum that "democratic ends demand democratic methods" be otherwise understood and applied to the problem of concentration of power in central government? Moving from theoretical analysis to practice we may note how the *PL* recognized and responded to the problem. The organization had a strategic focus on a national policy level,

³³ Lilienthal quotes from Dewey's *Freedom and Culture* (1939): "The conflict as it concerns the democracy to which our history commits us is *within* our own institutions and attitudes. It can be won only by extending the application of democratic methods, methods of consultation, persuasion, negotiation, communication, co-operative intelligence, in the task of making our own politics, industry, education, our cultures generally, a servant and an evolving manifestation of democratic ideas . . . democratic ends demand democratic methods for their realization" (LW13, 187).

³⁴ See Lamberts 2015, 81–84.

³⁵ In particular, through the Agricultural Extension Service and the Land Grant Colleges the *TVA* gave local farmers and their organizations influence over distribution of artificial fertilizers and practices introduced for improving agricultural production and preventing soil erosion (see Selznick 1949, 117–141).

³⁶ For example, "[t]he approach in extension service and *TVA* has been to deal with tenancy through the farm owners, considering sharecroppers as part of the larger farm unit ... there is evidence that the Agricultural Relations Department does not consider high or increasing rates of tenancy a problem" (Selznick 1949, 138).

³⁷ *Informal cooptation* is defined as "the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence" (1949: 13)

³⁸ See Selznick 1949, 138–140.

³⁹ See Selznick 1949, 144.

⁴⁰ See chapter 9 which is titled "Democracy at the grass roots: For the People and by the People" (Lilienthal 1944, 175–189).

which was typical of popular associations in the late Progressive Era.⁴¹ Moreover, on Mordecai Lee's interpretation (2015), the *PL*'s career provides an alternative to "the conventional narrative" of American public administration which "lauds [F.D.Roosevelt's] efforts to strengthen the presidency vis-à-vis Congress" (Lee 2015, 8). In so far, the *PL* presents "a counter narrative" through its "fierce opposition to this trend and its ongoing support for a congressionally centered federal government" (2015, 8). Working as a "multi-issue public interest" organization (2015, 6) the *PL* occasionally coordinated its efforts with other voluntary organizations to enforce pressure on the federal government.⁴² Moreover, through a variety of ways the *PL* sought to hold Congress representatives accountable to their constituents and thus to strengthen the democratic legitimacy of policy proposals. Through congressional hearings, communication with Congress representatives, through organizing conferences involving Congress representatives and having the conferences broadcasted on national radio and covered by national press,⁴³ the *PL* sought to sustain and improve the accountability of representatives of the legislative assembly, and thus to enforce democratic control of the central government. An example of the efforts to hold federal government and Congress accountable was the harsh criticism of the *TVA*'s land policies that Dewey originally put forth in a speech in Washington, DC, and that was broadcasted on national radio.⁴⁴ The concern with the *TVA*'s lacking accountability was thus brought up for a national audience and for politicians in Washington to enable democratic control.

Yet, the *TVA*'s "decentralized administration" not only raises issues of democratic accountability: it further evokes the question of how both experts and lay people may understand and assess social consequences of industrial technologies, and how experts could assist and support democratic control over policy development and implementation.

4. Failure to understand and control consequences of science and technology

In *TPIP* Dewey suggests that democratic control over implementation of new technologies depends on a kind of knowledge which is lacking: "the prime condition of a democratically organized public is a kind of knowledge which does not yet exist" (LW2, 339). Underlying this comment is a paradox that he spelled out on a later occasion. On the one hand, he observes, incessant scientific specialization has made the understanding of scientific affairs the privilege of ever smaller circles of experts;⁴⁵ on the other, science's social impact has increased dramatically through technological applications that "pervade and permeate [and] determine, every aspect of social life" (LW9, 97). The "new social impact of science" involves not only valued advances "in agriculture and all the varied forms of productive industry" (LW9, 97), but consequences

⁴¹ According to historical sociologist Elisabeth Clemens, popular associations tended in the late Progressive Era "to shift their attention from state to national politics" (1997, 296).

⁴² See Lee 2015, 81–83, 96, 113–114.

⁴³ Lee 2015, 6–7.

⁴⁴ See LW11, 256–257 and Lee 2015, 123.

⁴⁵ LW9, 96. See also LW2, 312; LW2, 343–34; LW2, 363–364.

increasingly perceived as problematic, such as weapons with increasing capacity to kill and involving “increased expenditures for armament” (LW9, 97). Yet, peace-time implements could also be taken as morally reprehensible through industry’s “brutal exploitation of nature and man” (LW2, 344), and, more indirectly, through persistent want in the midsts of technological “potentiality of plenty, of ease and security, for all” (LW9, 98). Dewey’s comment about a knowledge “which does not yet exist” (LW2, 339) refers to the failure of understanding, predicting and controlling such consequences of science and technology.

Dewey did not share the Conservationists’ optimistic idea of progress based on scientific and technological control.⁴⁶ He expressed humbleness as to the prospect of predicting and controlling consequences of technological interventions.⁴⁷ Dewey had learned from Veblen that there are limits to how social consequences of new technologies can be anticipated. Implementation of new technologies is conditioned by social practices and traditions, as well as inherited political institutions and laws, and in ways that may obstruct or conflict with professed policy goals.⁴⁸ Moreover, use of new technologies of production and transportation tend to affect consumers’ practices and preferences in ways unforeseen by legislators and public administrators. Dewey ponders that “the natural energies released by use of machinery have consequences independent of human foresight; [they] create new wants and set new conditions, for example, rapid transit and transportation” (MW15, 258–259). New modes of consumption thus emerge less as results of rational choice or planning⁴⁹ than as, in Veblen’s terminology, “[o]stentatious waste and conspicuous consumption” (MW15, 262). In addition, new products may carry risks for human health.⁵⁰

Dewey anticipates David Collingridge’s now classic formulation of the dilemma of social control of technology (1980). On the one hand, Collingridge points out, interactions between technology and society are so poorly understood that harmful consequences of “the fully developed technology cannot be predicted with sufficient confidence to justify the imposition of controls” (1980, 17). On the other hand, when harmful consequences of a sufficiently developed and diffused technology become apparent, the latter is no longer easily controlled because social

⁴⁶ Note Samuel P. Hayes’ assessment: “The new realms of science and technology, appearing to open up unlimited opportunities for human achievements, filled conservation leaders with intense optimism. They emphasized expansion, not retrenchment, possibilities, not limitations. True, they expressed some fear that diminishing resources would create critical shortages in the future. But they were not Malthusian prophets of despair and gloom ... They displayed that deep sense of hope which pervaded all those at the turn of the century for whom science and technology were visions of an abundant future” (Hayes 1999, 2–3).

⁴⁷ Note his comment in *Experience and Nature* (1925): “Through science we have secured a degree of power of prediction and of control; through tools, machinery and an accompanying technique we have made the world more conformable to our needs, a more secure abode. We have heaped up riches and means of comfort between ourselves and the risks of the world ... But when all is said and done, the fundamentally hazardous character of the world is not seriously modified, much less eliminated.” (LW1, 45).

⁴⁸ Dewey was influenced both by Veblen’s (1912 [1899]) and William F. Ogburn’s (1922) respective theses of cultural lag (see MW15, 259; LW2, 323; LW5, 48–50; Dewey 2012, 161–162).

⁴⁹ Dewey echoed Veblen in his general comment that “[t]he market and business determine wants, not the reverse” (MW15, 264. See also LW2, 301).

⁵⁰ “Risks of innovation in consumption greater than in production – qualitative, health ...” (Dewey 1928).

and economic institutions, as well as other technologies, have become adjusted to the new technology, and control becomes “very disruptive and expensive” (1980, 18). Collingridge’s example of the Green Revolution in effect updates Dewey’s observations of how technology implementation issues in “persistent want”, despite “potentiality of plenty, of ease and security, for all”: the Green Revolution was to provide protein rich food to the poorest segments of the population in developing countries, but largely failed due to the ways in which new agricultural technologies were accommodated to local inherited institutions that sustained economic inequalities.⁵¹ Another of Collingridge’s examples, the extensive and enduring use of lead in petrol, food canning and in pipe lines for drinking water distribution, brings up the issue of environmental hazards and health risks associated with technologies.⁵² Generally, through the 20th century adverse consequences of new technologies have been hard to control or eliminate due to ignorance and lacking scientific consensus, on the one hand, and, on the other, to the long standing adjustments between evolving technologies and economic and other institutions. While health risks and ecological risks have been increasingly recognized, an intellectual preparation for such recognition comes with Dewey’s warning of science’s limited ability to predict and control technology implementation and thus “the risks of the world” (LW1, 45). An intellectual preparation equally comes with the general theoretical emphasis Dewey put on understanding the complex and interdependent processes of organisms and their biophysical environments, sometimes by referring to the young science of ecology.⁵³ Such preparation could be complemented by an historical lesson from large scale resource development projects in the US, such as the *TVA*: although emphasizing dangers of over-exploitation and pollution, *TVA* leaders failed to anticipate how large scale technological interventions damaged rivers’ ecosystems and biodiversity.⁵⁴ In similar ways as the Green Revolution, with its monocultures and extensive use of pesticides and other chemicals, recognition of ecological degradation brought about through large scale resource development projects in rivers was slow in coming, and control over adverse consequences became costly and disruptive.

The first necessary step on part of science, Dewey holds, is to recognize moral responsibility for adverse consequences.⁵⁵ Yet, for the pragmatist, fulfillment of such responsibility is forward looking; like healing, fulfillment should “be preventive as well as curative” (LW9, 98). Epistemically, fulfillment of this prospective responsibility would need to go beyond prevailing compartmentalizations and specializations in science. Interdisciplinary organization is needed and terms for cooperation should be set, not by priorities of academic or ‘pure science’, but by the issues to be addressed. Dewey thus calls for a “unity of science” forged through practical

⁵¹ See Collingridge 1980, 13–15.

⁵² Collingridge 1980, 25–27.

⁵³ See LW16, 117, 120.

⁵⁴ For a relatively early consideration of ecologically adverse effects of the *TVA*’s implementation and operations, see Krenkel and Lee et al 1979.

⁵⁵ See LW9, 98.

cooperation between scientists.⁵⁶ However, in order to sustain social *and* democratic control over policies pertaining to natural resources and technology, inquiries need to engage ordinary citizens' experiences of the impact of new technologies. Inquirers thus need to consider the “vast return wave” of science and technology into “uses and enjoyments (and sufferings) of everyday affairs” and how such “return wave” deeply affects the “judgment and ... emotional affections, preferences, and aversions of everyday human beings” (LW16, 253). The latter, Dewey suggests, is a necessary starting point for any attempt “to minimize evil consequences and to intensify and extend good consequences” of this “return wave” (LW16, 256).

5. Social inquiry: citizen participation and policy development

In *TPIP* and elsewhere Dewey voices the need for social inquiry – inquiry which studies conflicting social situations and which potentially supports and enables democratic processes. However, for purposes of social inquiry, the very category of the social needs to be defined more inclusively than done or presupposed by specialized social sciences. For understanding how new technologies affect both consumers and producers, both physical and institutional aspects of the technologies must be taken into account.⁵⁷ Likewise, in understanding how economic activities may affect an effective distribution of opportunities, land and natural resources, as well as technologies, should be included in the very categorization of the social.⁵⁸ Consistent with this inclusive understanding Dewey suggests multiple ways of qualifying social groups and memberships as a point of departure for analyzing conflicting social situations. While “lines of demarcation [between groups] are ill-defined and overlapping” group membership can be construed along different lines: on economic criteria, in terms of “classes” or “occupational groups”, along “ideational” lines, as well as along “ethnic lines” (LC, 65). However, across such multiple criteria, he focuses on inter- og intragroups relations of dependence, domination or misrecognition that are embedded in social practices and institutions.⁵⁹ While Dewey uses the example of how Western women and industrial workers have been denied formal rights and opportunities,⁶⁰ one of the *PL*'s interventions was in support of ethnic groups subjected to misrecognition and neglect by US land policies. In 1930 the *PL* supported local tribes of Native Americans in a struggle over a federally liscenced private hydropower project in an Indian reservation in Flathead, Montana.⁶¹ Here and in other parts of the Northwest region Native

⁵⁶ Dewey thus suggested that “convergence can best be attained by considering how various sciences may be brought together in common attack upon practical social problems” (LW13, 276)

⁵⁷ “A steam-locomotive or a dynamo is a physical fact in its structure; it is a social fact when its existence depends upon the desire for rapid and cheap transportation and communication. The machine itself may be understood physically without reference to human aim and motive. But the railway or public-utility system cannot be understood without reference to human purposes and human consequences” (LW6: 64).

⁵⁸ See LW3, 47–48.

⁵⁹ LC, 66–71, 92–96.

⁶⁰ LC, 76–79.

⁶¹ See Lee 2015, 75.

Americans' fisheries were devastated through large scale hydropower and irrigation projects.⁶² Due to the vital economic import, but also the religious significance, of rivers and waterfalls for these indigenous communities, the latter were profoundly and irretrievably affected by prevailing land policies.

Yet, how could social inquiry engage parties affected by implemented land policies? Dewey's model of inquiry generally requires, firstly, that expert inquirers engage lay citizens' through "a subtle, delicate, vivid and responsive art of communication" (LW2, 350) and by implementing "methods of discussion, consultation and persuasion" (LW2, 365). While division of cognitive labour between experts and lay people would be involved,⁶³ participation on part of affected groups is required to adequately inform problem understanding and to anticipate relevant solutions. Secondly, research findings and proposed solutions should be distributed to inform and justify relevant policies, as well as to enable and inform citizens' participation in public policy discussions. In so far, "communication of the results of social inquiry is the same as the formation of public opinion" (LW2, 345). As suggested by Herbert Reid and Betsy Taylor (2006), Dewey's two requirements could be linked to recent developments in social science methodology and be exemplified through a now classical study of land ownership.

In 1979 a team of community organizers, activists, and academics collaborated to conduct a systematic study of landownership and taxation in Appalachia, a region stretching over six states in the Eastern USA where coal and mineral corporations had established an enduring economic stronghold since the late 19th century.⁶⁴ While during the Great Depression miners unions raised political demands across Central Appalachia, their conflicts with coal corporations were at times "dramatically quelled" (Gaventa 1980, 84) in ways that have continued to influence conflicts in the region after WWII.⁶⁵ By the 1970s local communities faced loss of control over agricultural land, but also "severe and persistent poverty, high unemployment, low educational attainment, poor infrastructure, a lack of social and health services" (Scott 2008, 242), as well as serious environmental consequences of surface mining and stripmining coal.⁶⁶ Against this historical background local community members' experiences were decisive for stating the very problem to be inquired into by the land ownership study. Moreover, the study not only exemplifies Dewey's general requirement of citizen participation: after receiving basic quantitative methodological training lay citizens participated as co-researchers, together with social science experts, and during different stages of the research process "the local knowledge ... of the citizens was an asset to the ... study" (Scott 2008, 241). Hence, the study has been recognized as "a pioneering effort in the interdisciplinary field of participatory action research" (Scott 2009, 186). In terms of its findings, the study strongly suggested that enduring land ownership patterns was a key for understanding a range of social and economic issues. By their out-of-state holding companies,

⁶² For an account of the history of the Flathead Indian Reservation and the struggles of the Flathead Native Americans' for sovereignty, see Cahoon 2005.

⁶³ See Bohman 1999, 465, 476; Bohman 2004, 27–28,

⁶⁴ Appalachian Land Ownership Task Force 1983.

⁶⁵ See Gaventa 1980, 84.

⁶⁶ See Scott 2008, 242.

coal and mineral corporations owned large tracts of land⁶⁷ in the region; through low taxation rates, these ownership patterns indirectly contributed to the region's poor health and social services.⁶⁸ Corporate control over land, including power to keep land out of the market, further suggested underlying reasons for the low level of infrastructure and economic development.⁶⁹ Hence, the study confirmed Dewey's philosophical point about taking land and technology into account in analyzing social phenomena, and it further brought out how effective private control over land, which "includes all mines, all minerals ... as well as coal" (LW11, 256), may enable "a private monopolization of opportunity" and thus a situation where the "great masses ... are dependent upon the will of others for opportunity" (LW11, 256). Moreover, consistent with Dewey's second requirement above, findings were communicated to local communities and politicians, and they thus informed demands for strengthening local land owners' rights against mining, for increasing federal power to confiscate corporate land for alternative economic development, as well as for more effective environmental regulation.⁷⁰ Despite lack of significant structural political changes in its wake, the study can be linked to the emergence of enduring multi-issue civic organizations pursuing community development, environmental protection, and social justice.⁷¹ Hence, like the *PL*, these civic organizations have sought to establish alliances across civil society through addressing adverse consequences of economic activities.

Nevertheless, the modest success of the Appalachia ownership study in terms of policy influence gives us pause to reflect on circumstances that might limit the prospects of sustaining democratic control through a Deweyan mode of inquiry. In fact, the early industrialization of central Appalachia suggests how local and national regulatory institutions have been increasingly undermined by the transnational scope of economic activities. Substantial parts of the early corporate land acquisition in the region were in fact administered from London, the world's financial centre in the 19th century.⁷² From a more general historical perspective, regulatory institutions in both North America and Western Europe were undermined by what historians of economics have qualified as the 'First Great Globalization'. Culminating in the decades before World War One an increasingly integrated world market emerged due to factors such as new transportation and communication technologies, a shared gold standard for currencies, belief in free trade among key economic decision makers, as well imperialist access to natural resources

⁶⁷ The study went through property tax data in 80 counties in the six Appalachia states and found that, in these counties, the samples represented 53 % of the total surface land, and in these samples corporations were found to own almost 40 % of the land and 70 % of the mineral rights (see Appalachian Land Ownership Task Force 1983, 14–18).

⁶⁸ Appalachian Land Ownership Task Force 1983, 41–42, 57–63.

⁶⁹ Appalachian Land Ownership Task Force 1983, 68–79.

⁷⁰ See Scott 2008, 236.

⁷¹ Such multi-issue organizations are *Alabama Arise* (see Scott 2008, 244) and *Kentuckians for the Commonwealth*, which tackles "broad environmental, political, and social justice issues, ranging from opposing mountaintop removal and industrial hog farms to promoting low-income utility assistance programs and youth recreation centers (Scott 2008, 243).

⁷² The industrialization of central Appalachia has thus been qualified as an "industrial 'colonization' " (Gaventa 1980, 53).

and cheap labour.⁷³ As recently pointed out by John Naryan (2016), Dewey's diagnosis of the problem of the public rests on premises that are in accordance with this historical perspective. Yet, as suggested by Dewey's anticipation of Collingridge's dilemma, Dewey was particularly concerned with the role and impact of science and technology in the global extension of economic activities. Hence, after World War One he put stress on the grave lack of regulation and control over the adverse consequences of new technologies, such as "brutal exploitation of nature and man in times of peace and high explosives and noxious gases in times of war" (LW2, 344). In continuation of Naryan's interpretation I will end by elaborating on how Dewey's concern with the global extension of economic activities may reflect back on his conceptualization of the public as polity and its current relevance. In particular, I explore how the conceptualization may capture relationships and associations that reach beyond a national polity and its institutions.

6. The public: national polities and transnational solidarities

In Dewey's conceptualization of the public as polity mutual interest in control of conditions of economic activities serves as the basis for the democratic legitimacy of regulatory policies and institutions. Above I used the examples of the *LIPA*'s third party efforts and the *PL*'s organizational and communicative activities to suggest how a mutual and popular interest in control could be negotiated and articulated. The *PL*'s "support for a congressionally centered federal government" (Lee 2015, 8) further suggested how an articulated interest could become effective in exerting democratic control over regulatory policies through the institutions of representative democracy. Nevertheless, Dewey did assume an historical perspective that sees institutional capacities for regulation and democratic control as undermined by an emerging economic globalization.⁷⁴ In *TPIP* he observed how national economies on both sides of the Atlantic had become interdependent and how new "industrial and commercial relations" have manifested themselves in "the struggle for raw materials, for distant markets, and in staggering national debts" (LW2, 315). He further saw the "plight of the [American] farmer" as a consequence of an emerging economic globalization of which the world war "was a manifestation" (LW2, 316): burdened with mortgages farmers had become vulnerable to fluctuating prizes in an international market and to the devastating effects of inflation or deflation. Yet, how could Dewey's conceptualization of the public as polity be adapted to the perspective concerning an evolving economic globalization?

We first note with Naryan (2016) that Dewey's intellectual and political response to the perceived economic globalization was twofold. On the one hand, he supported president W. Wilson's initiative for the *League of Nations* to avoid a return to an imperial world order,⁷⁵

⁷³ See O'Rourke and Williamson 1999; and Rodrik 2011 (in particular pp. 24–26, 34–40, 138–140).

⁷⁴ b 2016, 45–51.

⁷⁵ See MW11, 139–142. Yet, in the mid-1920s Dewey became increasingly more critical to USA's role in the *League of Nations*. In particular, he was concerned about the informal imperialism at work through USA's exploitation of natural resources in Mexico (see Westbrook 1991, 259–262).

new instability and war. An intergovernmental organization should promote the “equality of labor standards” and an equalization of access to “food and raw materials” (MW11, 142). Dewey voiced the need for a “permanent international executive body” (MW11, 136), powerful enough to “insure an adequate adjustment of rights” even between internally conflicting segments of national polities (MW11, 137). On the other hand, however, such institution building should “encourage voluntary groupings all over the world, and thus promote social integration by means of the cooperation of democratically self-governed industrial and vocational groups” (MW11, 105). In *TPIP*, observing the increasingly adverse consequences of economic globalization, he thought it necessary that, across nations, “the non-political forces organize themselves to transform existing political structures: that the divided and troubled publics integrate” (LW2, 315). While inter-war North American farmers would be among Dewey’s prime examples of “divided and troubled publics”, we may extend the scope, geographically and historically, to farmers and peasants strongly affected by economic globalization in other parts of the world and in more recent times. Against the historical background of the Green Revolution, its spreading of agricultural technologies to developing countries, and the hegemonic role of neoliberal land policies in the global South after 1980,⁷⁶ I adapt Dewey’s conceptualization of the public as polity to his call for transnational cooperation through a contemporary example.

Firstly, the conceptualization of the public as “related on the basis of mutual interest” (Dewey 1928) could be adapted to apply to agricultural producers (land owning farmers, tenant farmers, agricultural workers) that together with their local communities have lost control over land in a context of economic globalization, and that have a mutual interest in resisting loss of control and in claiming a right to use land. Across national borders such groups further have a mutual interest in cooperating and supporting each others’ causes through building transnational associations. Secondly, however, if, according to Dewey’s conceptualization, group members’ mutual interest is to provide a basis for the legitimacy of regulatory policies, intergovernmental, as well as national political institutions would be presupposed. Noting the ultimate failure of *The League of Nations*, the intergovernmental organization which originally provided Dewey’s historical model, but also Dewey’s later welcoming of *UNESCO*’s transnational inquiries into conceptions of human rights and democracy,⁷⁷ the *United Nation (UN)* system evolving after World War Two serves as the best approximation, despite its lack of executive power to “insure an adequate adjustment of rights” (MW11, 137).

To explore the relevance of this adaptation of Dewey’s conceptualization I consider the transnational network organization *La Via Campesina (LVC)* which emerged in the late 20th century as the largest organization of national and sub-national movements of poor peasants and small farmers in the global South and North.⁷⁸ Having emerged in critical response to economic globalization, *LVC* promotes local producers’ rights to land and to control conditions of food production and consumption, while it resists corporate control over agricultural land enabled by

⁷⁶ See Harvey 2005 (in particular pp. 101–104, 126–127, 160–161).

⁷⁷ LW16, 399–406.

⁷⁸ See Desmarais 2007; Borras and Franco 2010.

market-led land reforms and neo-liberal land policies since the late 1970s, particularly in nations in the South. In contrast to other transnational organizations of farmers, *LVC* has enabled representation and participation on part of the poorest agricultural producers.⁷⁹ Its flat network organization structure may be seen to approximate Dewey's ideal of transnational "cooperation of democratically self-governed ... groups" (MW11, 105).

Moreover, *LVC*'s struggle for peasants' right to land has been conditioned and enabled by its interaction with the *UN* system. The very notion of peasants' rights has been modelled on the *UN*'s framework of human rights.⁸⁰ For this notion equitable access to land is stressed as a basic condition for livelihood and housing, as well as for sustaining one's local community with food. In so far, this emphasis would accord with Dewey's general understanding of land as a matter of "equal" and "fundamental opportunity", and an opportunity "to be socially useful" (LW11, 256). Moreover, presupposing the model of the *UN*'s framework of human rights, *LVC* has in turn and in effect acknowledged the *UN* system as a legitimate intergovernmental organization, while openly contesting the legitimacy of other organizations (the World Bank, the International Monetary Fund, and the World Trade Organization) responsible for promoting and regulating implementation of neo-liberal land policies on a global basis.⁸¹

Epistemically, *LVC*'s ways of engaging in knowledge politics may seem to move beyond Deweyan principles of social inquiry. By contesting the use of sophisticated econometric methods for developing land policies while defending use of rural communities' local knowledge,⁸² *LVC* tends to value epistemic contributions of lay people higher than does Dewey's model for expert-lay cooperation, as exemplified by the Appalachia Landownership study. Nevertheless, *LVC* has cooperated with other expert groups in rearticulating and justifying local knowledge as a basis for ecologically sustainable practices, while rejecting typically Green Revolution technologies.⁸³ Elaborating on the Deweyan model, one could thus say that the terms for the cooperation between lay and expert, and an associated cognitive division of labour, have been re-negotiated.⁸⁴ Moreover, *LVC*'s knowledge politics re-evaluates and rehabilitates the practically based knowledge that is shared in peasant communities. In fact, claiming the relevance of peasants' practical knowledge for policy making the organization may find support in Dewey's criticism of "existing political practice" and its ignorance of "occupational groups and the organized knowledge and purposes that are involved in the existence of such groups" (LW11, 50). In addition, *LVC*'s employment of new communication technologies for extensive and swift sharing of information⁸⁵ harmonizes with Dewey's other principle that "the results of social inquiry" (LW2, 345) should be distributed to inform relevant policies as well as to enable citizens' participation in public discussion of policy solutions. In so far, political scientist Nora

⁷⁹ Borras and Franco 2010, 119, 130–133.

⁸⁰ See La Via Campesina 2009.

⁸¹ Borras and Franco 2010, 132–134. See also FIAN and La Via Campesina 2004.

⁸² Borras and Franco 2010, 134. See also Desmarais 2007, 42–54.

⁸³ See Borras 2008: 266.

⁸⁴ See James Bohman's qualification of Dewey's model in a different context (1999, 465–466).

⁸⁵ See Borras and Franco 2010: 134.

Hanagan rightly points out that “the methods pursued by La Via Campesina are distinctly Deweyan” (2015, 43).

Institutionally, this exemplification of the conceptualization of the public suggests how political participation may extend over different levels: local, national and transnational. In contrast to the *PL* and popular or civic associations in the Progressive Era, *LVC* exemplifies how new institutional spaces have been created for holding intergovernmental organizations, as well as national governments, accountable. Furthermore, the example suggests how relations of transnational solidarity have evolved that differ not only from the national alliances promoted by the *PL* and the *LIPA*, but from the kind of international solidaric engagement exerted by the *PL* for jeopardized groups abroad (such as Jews in Hitler’s Germany). The current example shows how relations of “mutual interest” could evolve as relations of mutual transnational solidarity between members of different national polities in the North and the South.

Given its policy focus on land, however, the example stresses how transnational relations are anchored in national or sub-national associations involved in local struggles over land. When seen through the example, members of a Deweyan public would resist ways in which foreign corporate control over land undermine conditions for local communities’ livelihoods and forms of life, and how implementation of Green Revolution technologies may issue in environmental degradation that in turn severe conditions for small scale farming, fishing and forestry.⁸⁶ Addressing such adverse consequences members of the public justify policies for local control over land in terms of ecologically sustainable practices, and healthy food produced for local communities under socially just conditions.⁸⁷ Propagating these justifications may be seen as new ways of performing democratic control and of holding governments accountable to segments negatively affected by prevailing land policies, like the Native Americans in Montana supported by the *PL*. Moreover, engaged in knowledge politics, local and national members may also contest formal expert-based ways of addressing adverse environmental consequences of industrial technologies, such as high CO₂ emissions.⁸⁸ At the heart of such knowledge politics, however, is the emphasis on local and practice based ways of conceiving land and human dependence on nature. In fact, the contestation of the privileged role of formal economical models for developing land policies could be seen to echo Dewey’s warning of relying exclusively on certain specialized and formal ways of understanding the earth, issuing in “a series of stratified earths, one of which is mathematical, another physical ... and so on”, each of which is too much abstracted from the world in which we live (MW1, 54). Finally, *LVC*’s insistence on practice based ways of conceiving the meaning of land in effect updates Dewey’s call for learning about our bio-physical environments through practical arts and occupations, given that “it is through these occupations that the intellectual and emotional interpretation of nature has been developed”, and that “[i]t is through what we do in and with the world that we read its meaning and measure its value” (MW1, 13).

⁸⁶ See Rosset and Martinez-Torres 2012.

⁸⁷ See Alonso-Fradejas et al 2015.

⁸⁸ See Hein and Faust 2014.

References

- Alonso-Fradejas, Alberto, and Saturnino M. Borrás, et al. 2015. "Food sovereignty: Convergence and Contradictions, Conditions and Challenges," *Third World Quarterly* 36(3): 431–448. doi: [10.1080/01436597.2015.1023567](https://doi.org/10.1080/01436597.2015.1023567)
- Appalachian Land Ownership Task Force. 1983. *Who Owns Appalachia? Landownership and Its Impact*. Lexington, KY: University Press of Kentucky.
- Arendt, Hannah. 1998 (1958). *The Human Condition*. Chicago, IL: University of Chicago Press.
- Bohman, James. 1999. "Theories, Practices, and Pluralism : A Pragmatic Interpretation of Critical Social Science," *Philosophy of the Social Sciences* 29: 459–480. doi: [10.1177/004839319902900401](https://doi.org/10.1177/004839319902900401)
- Bohman, James. 2004. "Realizing Deliberative Democracy as a Mode of Inquiry: Pragmatism, Social Facts, and Normative Theory," *Journal of Speculative Philosophy* 18(1): 23–43. doi: [10.1353/jsp.2004.0002](https://doi.org/10.1353/jsp.2004.0002)
- Bohman, James. 2010. "Participation through Publics: Did Dewey answer Lippmann?," *Contemporary Pragmatism* 7(1): 49–68. doi: [10.1163/18758185-90000155](https://doi.org/10.1163/18758185-90000155)
- Borrás, Saturnino M. 2008. "La Vía Campesina and its Global Campaign for Agrarian Reform," *Journal of Agrarian Change*, 8(2–3): 258–289. doi: [10.1111/j.1471-0366.2008.00170.x](https://doi.org/10.1111/j.1471-0366.2008.00170.x)
- Borrás, Saturnino M., and Jennifer C. Franco. 2010. "Campaigns for Land and Citizenship Rights: The Dynamics of Transnational Agrarian Movements," in *Globalizing Citizens: New Dynamics of Inclusion and Exclusion*, ed. John Gaventa and Rajesh Tandon (London: Zed Books), pp. 119–139.
- Brown, Richard J. 1968. "John Dewey and the League for Independent Political Action," *The Social Studies* 59(4): 156–161.
- Cahoon, Heather M. 2005. *For Better or for Worse: Flathead Indian Reservation Governance and Sovereignty*. Theses, Dissertations, Professional Papers. 9549. At: <http://scholarworks.umt.edu/etd/9549>, assessed 25 May 2018.
- Clemens, Elisabeth S. 1997. *The People's Lobby: Organizational Innovations and the Rise of Interest Group Politics, 1890–1925*. Chicago, IL: University of Chicago Press.
- Collingridge, David. 1980. *The Social Control of Technology*. London: Frances Pinter.
- Deen, Phillip. 2016. "Recontextualizing Dewey's The Public and Its Problems," *History of Political Thought* 37(3): 509–529.
- Desmarais, Annette Aurélie. 2007. *La Vía Campesina: Globalization and the Power of Peasants*. London: Pluto Press.
- Dewey, John. 1976–1983. *The Middle Works: 1899–1924*. 15 volumes, ed. Jo Ann Boydston. Carbondale, IL: Southern Illinois University Press. (Citations of items in this edition are indicated by MW followed by volume and page numbers.)
- Dewey, John. 1981–1992. *The Later Works: 1925–1953*. 17 volumes, ed. Jo Ann Boydston. Carbondale, IL: Southern Illinois University Press. (Citations of items in this edition are indicated by LW followed by volume and page numbers.)
- Dewey, John. 1973. *Lectures in China, 1919–1920*. Translated and edited by R.W. Clopston and Tsuin-Chen Ou. Honolulu: The University of Honolulu Press. (References to this work are indicated by LC followed by page numbers.)
- Dewey, John. 1928. "Social Philosophy" (Lecture Notes), Box 33, Folder 9, John Dewey papers, 1858–1970, Special Collections Research Center, Southern Illinois University, Carbondale.

- Eisenberg, Ernest O. 1933. "Recent Tendencies in the Regulation of Public Utility Holding Companies," *Marquette Law Review* 17(4): 283–291.
- FIAN (Food First and Action Information Network) and La Via Campesina. 2004. *Global Campaign for Agrarian Reform Working document: Commentary on land and rural development policies of the World Bank*. At: https://www.fian.org/library/publication/global_campaign_for_agrarian_reform_working_document/, assessed 24 May 2018.
- Gaventa, John 1980. *Power and Powerlessness in Appalachia: Quiescence and Rebellion in an Appalachian Valley*. Urbana: University of Illinois Press.
- Hamilton, Walton H. 1930. "Affectation with Public Interest," *Yale Law Journal* 34(8): 1089–1112.
- Hanagan, Nora. 2015. "From Agrarian Dreams to Democratic Realities: A Deweyan Alternative to Jeffersonian Food Politics," *Political Research Quarterly* 68(1): 34–45. doi: 10.1177/1065912914564880
- Harvey, David. 2005. *A Brief History of Neoliberalism*. Oxford: Oxford University Press.
- Hayes, Samuel P. 1999. *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920*. Pittsburgh, PA: University of Pittsburgh Press.
- Hein, Jonas, and Heiko Faust. 2014. "Conservation, REDD+ and the Struggle for Land in Jambi, Indonesia," *Pacific Geographies* 23(41), 21–25. At: <https://doaj.org/article/9cdb2ee25f8f4afe88731524d59444e4>, assessed 2 August 2018.
- King, Judson. 1959. *The Conservation Fight: From Theodore Roosevelt to the Tennessee Valley Authority*. Washington DC: Public Affairs Press.
- Krenkel, Peter A., and G. F. Lee, et al. 1979. "Effects of TVA Impoundments on Downstream Water Quality and Biota," in *The Ecology of Regulated Streams*, ed. James Ward and Jack A. Stanford (New York: Plenum Press), pp. 289–306.
- Lambert, Jeremiah D. 2015. *The Power Brokers: The Struggle to Shape and Control the Electric Power Industry*. Cambridge, MA: The MIT Press.
- La Via Campesina. 2009. *Declaration of Rights of Peasants - Women and Men*. At: <https://viacampesina.org/en/declaration-of-rights-of-peasants-women-and-men/>, accessed 23 May 2018.
- Lee, Mordecai. 2015. *The Philosopher-Lobbyist: John Dewey and the People's Lobby, 1928–1940*. Albany, NY: State University of New York Press.
- Lilienthal, David E. 1944. *TVA: Democracy on the March*. New York, NY: Harper and Brothers Publishers.
- Lippmann, Walter. 1997 (1922). *Public Opinion*. New York, NY: Free Press Paperbacks.
- Lippmann, Walter. 1993 (1927). *The Phantom Public*. New Brunswick: Transaction Publishers.
- MacGilvray, Eric. 2010. "Dewey's Public," *Contemporary Pragmatism* 7(1): 31–47. doi: [10.1163/18758185-90000154](https://doi.org/10.1163/18758185-90000154)
- Naryan, John. 2016. *John Dewey: The Global Public and Its Problems*. Manchester: Manchester University Press.
- Ogburn, William F. 1922. *Social Change with Respect to Culture and Original Nature*. New York, NY: B. W. Huebsch.
- Pinchot, Gifford. 1911. *The Fight for Conservation*. New York, NY: Doubleday, Page and Company.
- Pinchot, Gifford. 1945–1946. "The Long Struggle for Effective Federal Water Power Legislation," *The George Washington Law Review* 14: 9–20.

- O'Rourke, Kevin H. and Jeffrey G. Williamson. 1999. *Globalization and History: The Evolution of a Nineteenth Century Atlantic Economy*. Cambridge, Mass.: MIT Press.
- Reid, Herbert, and Betsy Taylor. 2006. "Globalization, Democracy and the Aesthetic Ecology of Emergent Publics for a Sustainable World: Working from John Dewey," *Asian Journal of Social Science* 34(1): 22–46. doi: [10.1163/156853106776150135](https://doi.org/10.1163/156853106776150135)
- Rodrik, Dani. 2011. *The Globalization Paradox: Democracy and the Future of the World Economy*. London: Norton.
- Rogers, Melvin. 2009. *The Undiscovered Dewey: Religion, Morality, and the Ethos of Democracy*. New York, NY: Columbia University Press.
- Rogers, Melvin. 2010. "Dewey and his vision of democracy," *Contemporary Pragmatism* 7(1): 69–91. doi: [10.1163/18758185-90000156](https://doi.org/10.1163/18758185-90000156)
- Rosset, Peter M., and Maria Elena Martinez-Torres. 2012. "Rural Social Movements and Agroecology: Context, Theory, and Process," *Ecology and Society* 17(3): 17. At <http://dx.doi.org/10.5751/ES-05000-170317>, assessed 5 June 2018.
- Scott, Shaunna L. 2008. "Discovering what the people knew: The Appalachian Land Ownership Study Revisited," *Appalachian Journal* 35(3): 236–252.
- Scott, Shaunna L. 2009. "The 1979 Appalachian Land Ownership Study," *Action Research* 7(2): 185–205. doi: [10.1177/1476750309103257](https://doi.org/10.1177/1476750309103257)
- Selznick, Phillip. 1949. *TVA and the Grass Roots: A Study in the Sociology of Formal Organizations*. Berkley and Los Angeles, CA: University of California Press.
- Tilman, Rick. 1998. "John Dewey as User and Critic of Thorstein Veblen's Ideas," *Journal of the History of Economic Thought* 20(2): 145–60.
- US Supreme Court. 1877. *Munn v. Illinois*, 94 U.S. 113 (1876). At: <https://supreme.justia.com/cases/federal/us/94/113/>, assessed 1 August 2018.
- Veblen Thorstein 1912 (1899). *The Theory of the Leisure Class*. New York, NY: The Macmillan Company.
- Westbrook, Robert B. 1991. *John Dewey and American Democracy*. Ithaca, NY: Cornell University Press.